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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,487	01/15/2004	Felix Henry	01807.002568.	4175

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EXAMINER	
WOLDEMARIAM, AKILILU K	
ART UNIT	PAPER NUMBER
2609	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/757,487	HENRY, FELIX	
	Examiner	Art Unit	
	Aklilu k. Woldemariam	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/15/2004, 02/27/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on February 27, 2006 was filed after the mailing date of the same on February 27, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

Claim Objections

3. **Claims 17 and 19** are objected to because of the following informalities: **The device according to any one of claims 9, 14 and 15. "And" replaced with "or".** Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 7 and 15** are rejected under 35 U.S.C. 102(b) as being anticipated by Chui et al., Chui (U.S. Patent number 6, 041, 143).

Regarding claims 7 and 15, Chui discloses **a method and a device of decoding encoded data, the encoded data** (see column 3, lines 65-67) **comprising a**

plurality of predefined resolutions (see abstract, line 1, i.e., Plurality referred as to multiple and see column 10, lines 1-2), **comprising the steps of selecting an intermediate resolution** (see column 1, lines 54-56) **between a first predefined resolution** (see column 11, lines 13-14) and **a second predefined resolution** (see column 13, lines 39-40), **the second resolution being higher than the first resolution, determining a quantity of encoded data of the second resolution depending on the intermediate resolution** (see column 1, lines 43-44, i.e., quantity referred as to amount), **decoding the determined quantity of encoded data** (see item 122, 124, 126, 136, 138, 142,144 and 150, fig.3 and column 3, lines 66-67), and **sub sampling the decoded data** (see column 5, line 2 and 14, column 9, lines 42-43 and column 13, lines 13-14) **from the second resolution to the intermediate resolution.**

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 1-6, 8-14 and 16-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chui, as applied to claims 7 and 15, above and in view of Spiegel et al., Spiegel (U.S. Patent number 5, 615, 282A).

Regarding claims 1 and 9, Chui discloses **a method and a device of decoding an encoded digital image, the encoded data of the image** (see item 122,

124, 126, 136, 138, 142,144 and 150, fig.3 and column 3, lines 66-67) **comprising a plurality of predefined resolutions** (see abstract, line 1, i.e., Plurality referred as to multiple and see column 10, lines 1-2), **comprising the steps of selecting a resolution lower than the highest of the predefined resolutions** (see column 10, lines 9-10, 17-18, 47-50, i.e., highest of the predefined resolutions referred as to full resolutions), **determining the predefined resolution immediately above the selected resolution** (see column 7, lines 40-44), **determining a quantity of data of the determined predefined resolution** (see column 6, lines 53-54), **decoding the image** (see column 3, lines 66-67) **at the determined predefined resolution, as a function of the determined quantity of data** (see column 6, lines 53-54), **sub sampling the decoded image** (see column 5, line 2 and 14, column 9, lines 42-43 and column 13, lines 13-14).

Chui does not disclose **a function of the ratio between the selected resolution and the determined predefined resolution.**

However, Spiegel discloses **a function of the ratio** (see item 1402, fig.60, column 36, lines 51-54) **between the selected resolution and the determined predefined resolution.**

It would have been obvious to someone of the ordinary skill in the art at the time when the invention was made to use Spiegel's a function of the ratio between the selected resolution and the determined predefined resolution in Chui's a method and a device of decoding an encoded digital image, the encoded data of the image because it will allow to maintain maximum image quality, the ratio of the old size to the new size is

a very important consideration during resampling, [Spiegel's, see column 2, lines 43-44].

Regarding claims 2 and 10, Chui discloses **a decoding method and device according to claims 1 and 9, comprising the prior display of the image at a predefined initial resolution** (see column 7, lines 53-57 and column 8, lines 61-65) **and in that the selection of a resolution is an instruction for change of size of the image with respect to the predefined initial resolution** (see column 7, lines 51-57).

Regarding claims 3 and 11, Chui discloses **a decoding method and device according to claims 1 and 10, the encoded data** (see column 3, lines 45-46) **comprising a plurality of layers within each predefined resolution** (column 5, lines 4-9 and column 6, lines 5-8), **wherein the determination of a quantity of data is the determination of a number of layers of the determined predefined resolution** (see column 6, lines 53-54).

Regarding claims 4 and 12, Chui discloses **a decoding method and device according to claims 1 and 9, wherein the determination of a quantity of data of the determined predefined resolution** (see column 6, lines 53-54).

Chui does not disclose **a function of the ratio between the number of pixels of the selected resolution and the number of pixels of the determined predefined resolution.**

However, Spiegel discloses **a function of the ratio** (see item 1402, fig.60, column 36, lines 51-54) between **the number of pixels of the selected resolution and the number of pixels of the determined predefined resolution.**

It would have been obvious to someone of the ordinary skill in the art at the time when the invention was made to use Spiegel's a function of the ratio between the selected resolution and the determined predefined resolution in Chui's a method and a device of decoding an encoded digital image, the encoded data of the image because it will allow to maintain maximum image quality, the ratio of the old size to the new size is a very important consideration during resampling, [Spiegel's, see column 2, lines 43-44].

Regarding claims 5 and 13, Chui discloses **a decoding method and device according to claims 1 and 9, wherein the decoding of the image at the determined predefined resolution is furthermore carried out as a function of the data of the predefined resolutions lower than the selected resolution, if the determined predefined resolution is not the lowest for the image considered** (se column 1, lines 39-41 and column 7, lines 4-8, 31-33 and column 9, lines 37-39).

Regarding claims 6 and 14, Chui discloses **a method and a device of decoding encoded data, the encoded data** (see item 122, 124, 126, 136, 138, 142,144 and 150, fig.3 and column 3, lines 66-67) **comprising a plurality of predefined resolutions Rn** (see abstract, line 1, i.e., Plurality referred as to multiple and see column 10, lines 1-2), **comprising the steps of determining an intermediate resolution** (see column 1, lines 54-56) **between a first resolution Ra and a second resolution Ra+l, determining a quantity of encoded data of the second resolution corresponding to the intermediate resolution** (see column 5, lines 29-35), **decoding the determined quantity of encoded data** (see column 3, lines 66-67), **the**

determined quantity of encoded data includes encoded data (see item 122, 124, 126, 136, 138, 142,144 and 150, fig.3 and column 3, lines 66-67) **corresponding to the first resolution Ra, and a part of encoded data included in encoded data** (see item 122, 124, 126, 136, 138, 142,144 and 150, fig.3 and column 3, lines 66-67) **corresponding to the second resolution Ra+1 but not included in the encoded data corresponding to the first resolution Ra.**

Chui does not disclose **scaling the decoded image, as a function of the ratio between the intermediate resolution and one of the predefined resolutions Rn.**

However, Spiegel discloses **scaling the decoded image** (item 32, fig.5, column 36, lines 55-65)**, as a function of the ratio** (see item 1402, fig.60, column 36, lines 51-56) **between the intermediate resolution and one of the predefined resolutions Rn.**

It would have been obvious to someone of the ordinary skill in the art at the time when the invention was made to use Spiegel's a function of the ratio between the selected resolution and the determined predefined resolution in Chui's a method and a device of decoding an encoded digital image, the encoded data of the image because it will allow to maintain maximum image quality, the ratio of the old size to the new size is a very important consideration during resampling, [Spiegel's, see column 2, lines 43-44].

Regarding claims 8 and 16, Chui discloses **a decoding method and device according to claims 7 and 15, wherein the determined quantity of encoded data** (see column 3, lines 65-67).

Chui does not disclose **function of the ratio between the intermediate resolution and the second resolution.**

However, Spiegel discloses **function of the ratio** (see item 1402, fig.60, column 36, lines 51-54) **between the intermediate resolution and the second resolution.**

It would have been obvious to someone of the ordinary skill in the art at the time when the invention was made to use Spiegel's a function of the ratio between the selected resolution and the determined predefined resolution in Chui's a method and a device of decoding an encoded digital image, the encoded data of the image because it will allow to maintain maximum image quality, the ratio of the old size to the new size is a very important consideration during resampling, [Spiegel's, see column 2, lines 43-44].

Regarding claim 17, Chui discloses **a decoding device according to any one of claims 9, 14 or 15, characterized in that the means for selecting** (see column 8, line 41)**, determining (**see column 1, line 43, i.e., determining referred as to computation)**, decoding** (see item 122, 124, 126, 136, 138, 142,144 and 150, fig.3 and column 3, lines 66-67) **and sub sampling** (see column 5, line 2 and 14, column 9, lines 42-43 and column 13, lines 13-14) **are incorporated in a microprocessor, a read only memory** (see column 3, lines 14-25)**, comprising a program for processing the data, and a random access memory comprising registers adapted to record variables modified during the execution of the program** (see column 3, lines 15-60 and column 4, lines 1-15).

Regarding claim 18, Chui discloses **an apparatus for processing a digital image, characterized in that it comprises means adapted to implement the method according to claim 1** (see column 3, lines 25-60 and column 4, lines 1-15).

Regarding claim 19, Chui discloses **an apparatus for processing a digital image, characterized in that it comprises the device according to any one of claims 9, 14 or 15** (see column 3, lines 14-25).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aklilu k. Woldemariam whose telephone number is 571-270-3247. The examiner can normally be reached on Monday-Thursday 6:30 a.m-5:00 p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander Eisen
SPE
Art Unit 2609

A.W.
08/15/2007